

CLAIMS:

1. A memory management system for allocating memory in a memory space according to amounts of memory requested by a client, said memory space comprises a number of equally sized containers, and at least some of said containers comprise a number of equally sized sub containers, said system further comprises:

- 5 – means for generating a memory block, wherein the size of said memory block is selected between a number of predefined sizes, where the selected size is at least equal to said amount of memory requested by the client,
- means for allocating memory for said memory block in a container, the container being the smallest container having a size being at least twice the size of the memory
10 block.

2. A memory management system according to claim 1, wherein the sub container being placed in a container has a size being at least twice as small as said container.

15 3. A memory management system according to claim 1, wherein a container is dedicated for equally sized memory blocks.

4. A memory management system according to claim 1, wherein the size of the largest container has been selected in such a way that when filling the memory space with the
20 largest containers, the remaining area being smaller than said largest container has a size which is significantly smaller than said largest container.

5. A memory management system according to claim 1, wherein the size of the sub container being placed in a container has been selected in such a way that when filling
25 the container with said sub containers, the remaining area being smaller than said sub container has a size which is significantly smaller than said sub container.

6. A method of allocating memory in a memory space according to the amounts of memory requested by a client, said memory space comprises a number of equally sized

containers, and at least some of said containers comprise a number of equally sized sub containers, said method comprises the steps of:

- generating a memory block, wherein the size of said memory block is selected between a number of predefined sizes, where the selected size is at least equal to said amount of memory requested by the client,
- allocating memory for said memory block in a container, the container being the smallest container having a size being at least twice the size of the memory block.

7. A method according to claim 6, wherein the sub container being placed in a container has a size being at least twice as small as said container.

8. A method according to claim 6, wherein a container is dedicated for equally sized memory blocks.

9. A method according to claim 6, wherein the size of the largest container is selected in such a way that when filling the memory space with said largest containers, the remaining area being smaller than said largest container has a size which is significantly smaller than said largest container.

10. A method according to claim 6, wherein the size of the sub container being placed in a container is selected in such a way that when filling the container with said sub containers, the remaining area being smaller than said sub container has a size which is significantly smaller than said sub container.

11. An operating system embodied on a computer readable medium, the operating system comprising a method of managing memory according to claim 6-10.

12. A computer readable medium comprising an algorithm for performing a method of managing memory according to claim 6-10.

13. An embedded real-time software system the real-time software system comprising a method of managing memory according to claim 6-10.

14. A file system comprising a method of managing memory according to claim 6-10.